# **BookletChart**

# **Upper Niagara River**

(NOAA Chart 14832)



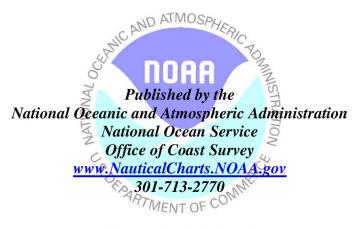
A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Convenient size
- ☑ Up to date with all Notices to Mariners
- ☑ United States Coast Pilot excerpts

☐ Compiled by NOAA, the nation's chartmaker.



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### **What are Nautical Charts?**

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

#### What is a BookletChart<sup>™</sup>?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

#### **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



#### [Coast Pilot 6, Chapter 6 excerpts]

(39) At its E end, Lake Erie becomes comparatively narrow and has its outlet in the Niagara River. From the head of the river, it is about 20 miles to the falls and rapids of American Falls and Horseshoe Falls. About 5 miles below the head, the river is divided into two channels by Strawberry Island and Grand Island. Tonawanda Channel and Niagara River Channel, the U.S. channels, lead to the E of these islands, and Chippawa Channel, the Canadian channel, leads to the

W of these islands. At the lower end of Grand Island, the channels rejoin and lead for about 3.5 miles to the falls.

(40) The **International boundary** between the United States and Canada follows a general middle of the river course in the upper Niagara River from the head of the river downstream to the head of Grand Island where the river forks around the island. The boundary then follows Chippawa

Channel and is generally less than 1,000 feet off the W shore of Grand Island until Chippawa Channel and Niagara River Channel join at the NW end of Grand Island. The boundary again follows a general middle of the river course around the S side of **Goat Island** and over Niagara Falls

(50) The Lake Erie entrance to Black Rock Canal is through Buffalo Harbor North Entrance Channel and across the Outer Harbor Northern Channel to Black Rock Canal Entrance Channel. From its entrance, the canal leads northward along the Buffalo front, parallel with the river and separated from it by **Bird Island Pier** and Squaw Island. Bird Island Pier and Squaw Island retain the canal pool from the W, and, along with Black Rock Lock, serve to keep the canal level at the same elevation as the water surface of Lake Erie.

(51) From Black Rock Lock at the lower end of Squaw Island, the dredged channel extends to a point about 0.7 mile below **Pirates Island**, off the SE side of Grand Island, thence through the natural deep water of Tonawanda Channel. W of **Tonawanda Island**, the dredged channel continues to a turning basin on the N side of Tonawanda Island at North Tonawanda.

(56) **Black Rock Lock** connects the canal with the river near the foot of Squaw Island. The lock has a usable length of 625 feet with a clear width of 68 feet and a depth of 21 feet over the sills. The lock has an average lift of 5.2 feet.

(66) **Bird Island** is on the W side of the Black Rock Canal about 1.3 miles below the entrance. Piers that enclose the canal extend S from Bird Island and N to connect with Squaw Island. A **special anchorage** is on the N and S sides of Bird Island. (See **33 CFR 110.1 and 110.84**, chapter 2, for limits and regulations.) Caution

(77) Just below Black Rock Lock, **Strawberry Island** divides the Niagara River into Chippawa Channel and Tonawanda Channel, leading W and E, respectively, of Grand Island. **Chippawa Channel** extends from Strawberry Island for about 11 miles along the SW and W sides of Grand Island to **Navy Island** at the downstream end. The channel leads around either side of Navy Island and joins Niagara River Channel to flow to **Niagara Falls.** In 1982, Chippawa Channel had a reported controlling depth of about 9 feet with shallower depths along the shores. Both sides of Navy Island have good channels but care must be taken to avoid the shoals that extend off the S and NW tips of the island.

(80) **Tonawanda Channel** extends from Strawberry Island for about 8.5 miles along the E side of Grand Island to **Tonawanda Island** and the adjoining cities of Tonawanda and North Tonawanda. The dredged and natural channel through this stretch was previously described.

(81) **South Grand Island Bridge**, crossing the channel about 3.4 miles below Strawberry Island, has twin fixed highway spans with a clearance of 99 feet at the center of the central spans. Vessels requiring the full height should keep at least 90 feet from the face of the piers. Two overhead power cables with a minimum clearance of 115 feet cross the channel about 0.75 mile downstream of the bridge.

(88) **Tonawanda Harbor**, about 12 miles via Tonawanda Channel below the head of the Niagara River, is the W terminus of the New York State Barge Canal. The harbor comprises the river frontage of **Tonawanda**, **N.Y.**, and **North Tonawanda**, **N.Y.**; **Tonawanda Creek**, which separates the two cities, for about 1,400 feet to the Main-Webster Street Bridge; and all of the waterfront of Tonawanda Island, which lies in the river off the main shore.

(94) The **New York State Canal System** is entered through Tonawanda Creek.

(95) **Niagara River Channel**, a dredged channel, leads from the lower end of the turning basin at North Tonawanda along the N side of Grand Island to a basin off the public dock at Niagara Falls, N.Y. In October 2002, the controlling depth in the channel was 11.8 feet. The channel is marked with buoys.

(97) A marina on the N side of the lower entrance to Little River provides gasoline, ice, a launching ramp, a 2-ton lift, and hull and engine repairs.



Pump-out facilities

# Corrected through NM Oct. 19/02 Corrected through LNM Oct. 8/02

#### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

PROHIBITED AREA
Do not enter without authorization from
the Federal Minister of Transport.

#### CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

#### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

Racing buoys within the limits of this chart e not shown hereon. Information are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

#### POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

#### CAUTION

#### SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area

Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling. Covered wells may be marked by lighted or unlighted buoys.

#### NOTE C CAUTION

Cables for an Ice Boom are permanently attached to anchors on the lake bottom. They are submerged and not buried. Floating steel pontoons are attached to these cables between December 15 and April 1.

The National Weather Service station listed below provides continuous marine weather broad-casts. The range of reception is variable, but for most stations is usually 20 to 40 miles from the antenna site.

Buffalo, NY KEB-98 162.55 MHz (Chan. WX-1)

#### CAUTION

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

(Accurate location) o(Approximate location)

#### COPYRIGHT

No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

Low Water Datum, which is the plane of reference for the levels shown on the above hydrograph, is also the plane of reference for the charted depths, If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

#### SUPPLEMENTAL INFORMATION Consult U.S. Coast Pilot 6 for important supplemental information.

## Table of Selected Chart Notes

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot 6 for details.

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84) Geographic positions referred to the North American Datum of 1902 must be corrected an average of 0.219' northward and 0.799' eastward to agree with this chart.

#### CAUTION

Mariners are warned that numerous uncharted stakes and fishing structures, some submerged, may exist in the area of this chart. Such structures are not charted unless known to be permanent.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast
Pilot 6. Additions or revisions to Chapter 2 are published in the Notices
to Mariners. Information concerning the regulations may be obtained at
the Office of the Commander, 9th Coast Guard District in Cleveland,
OH, or at the Office of the District Engineer, Corps of Engineers in
Buffalo, NY.
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Refer to charted regulation section numbers.

#### CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged, particularly in the near shore areas. Mariners should proceed with

#### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot</u>.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

#### CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the

## POTABLE WATER INTAKE

Vessels operating in fresh water lakes or rivers shall not discharge sewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental information.

#### CAUTION

#### BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearance see U.S. Coast Pilot 6.

SAILING DIRECTIONS. Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart No. 1.

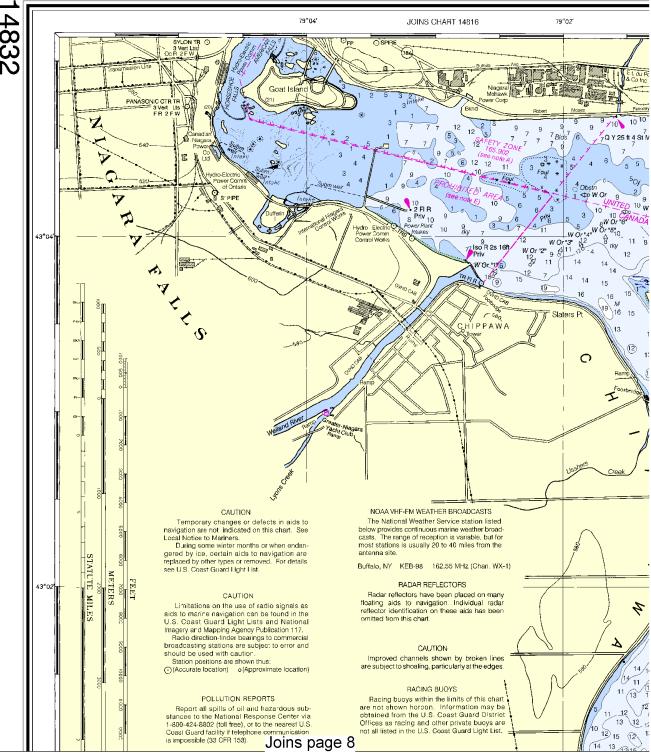
AIDS TO NAVIGATION. Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation. See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

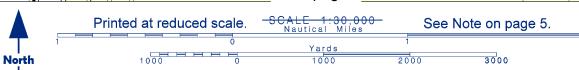
AUTHORITIES. Hydrography and topography by the the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian authorities.

#### PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafts, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-80-0584-4883, http://NoceanGrafts.com, or help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com

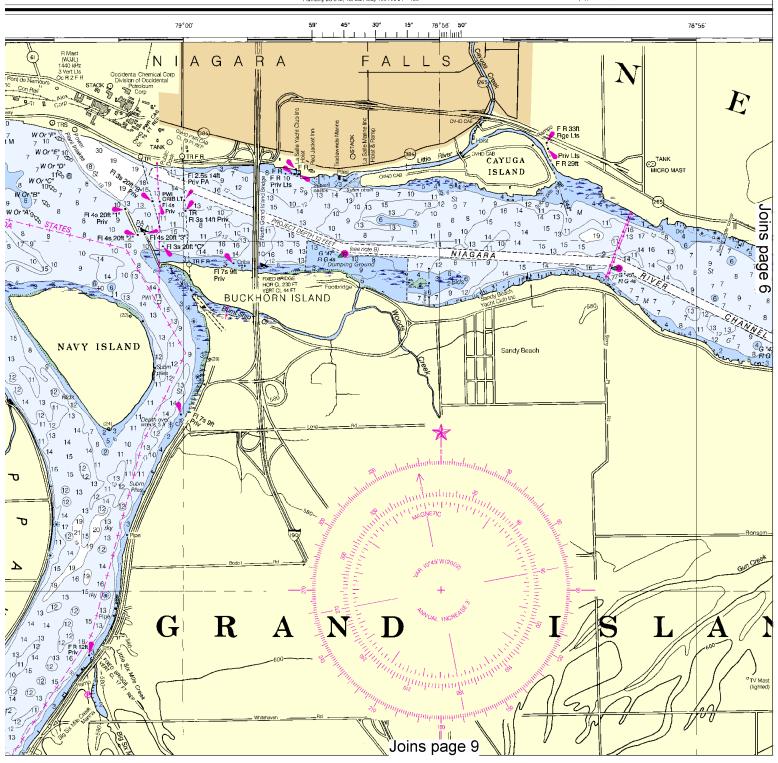
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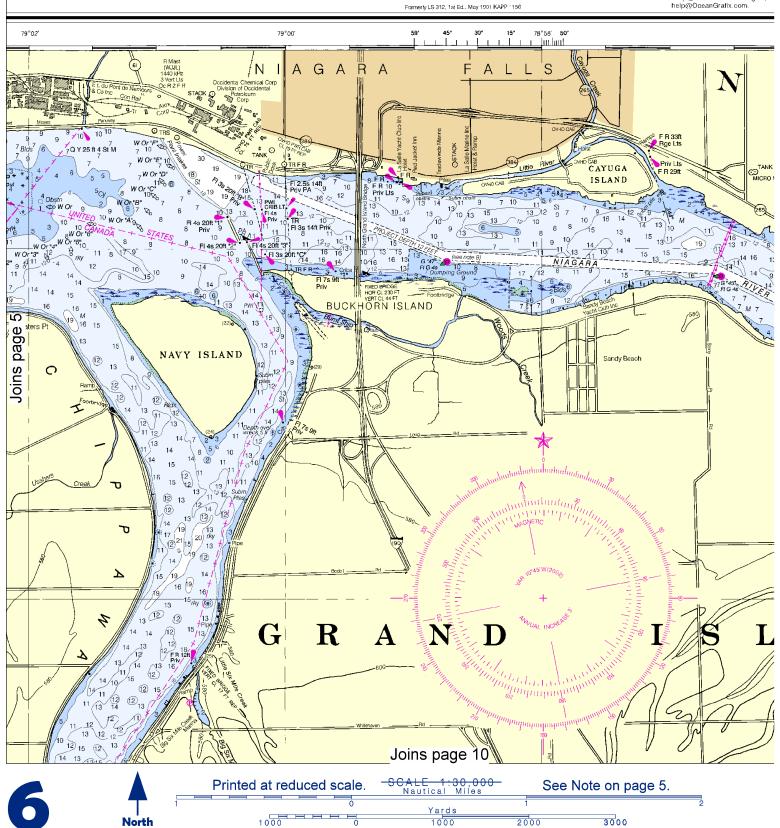
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Formerly LS 312, 1st Ed., May 1901 KAPP 1156



This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:40000. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.





North

2000

3000

#### PRINT-ON-DEMAND CHARTS

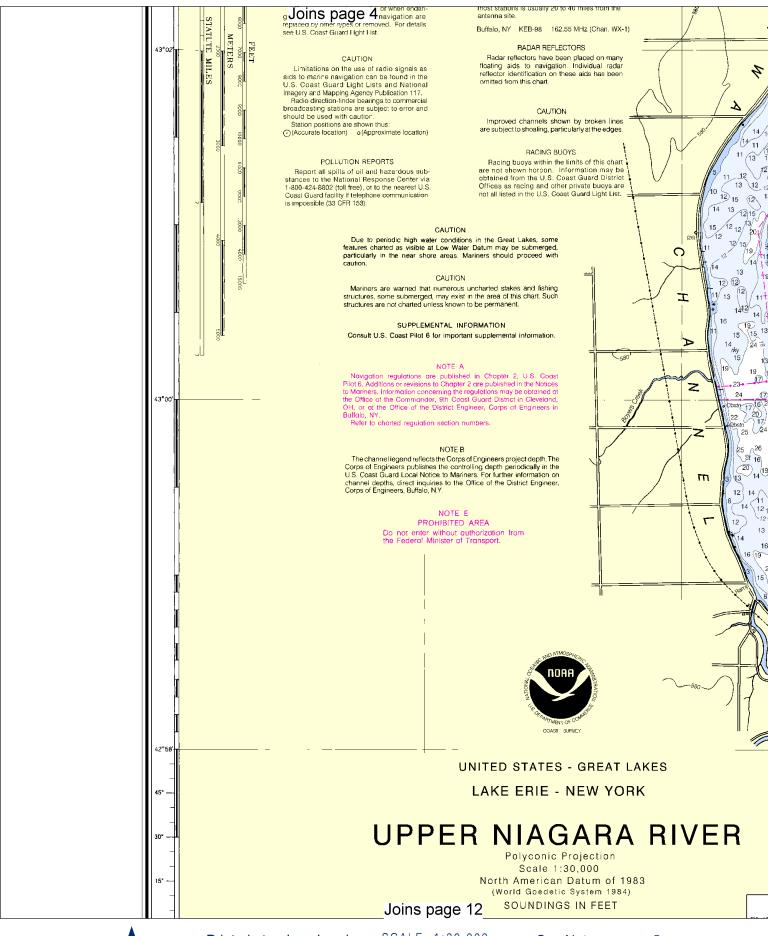
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# SOUNDINGS IN FEET

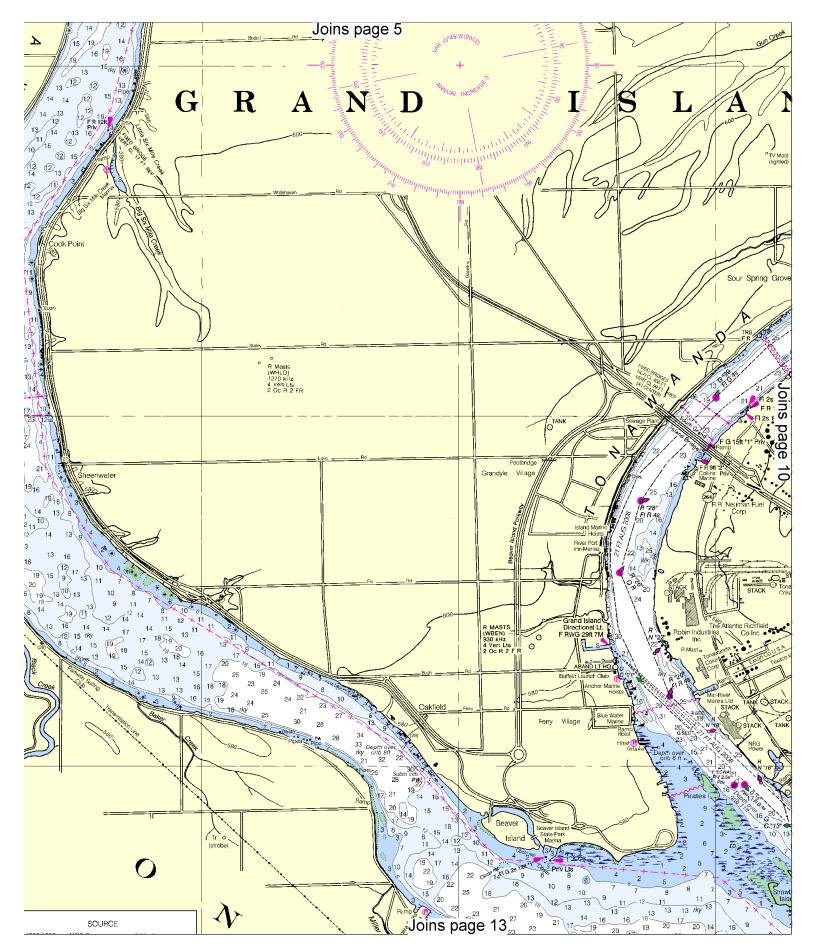
Nautical Chart Catalog No. 4, Panel D

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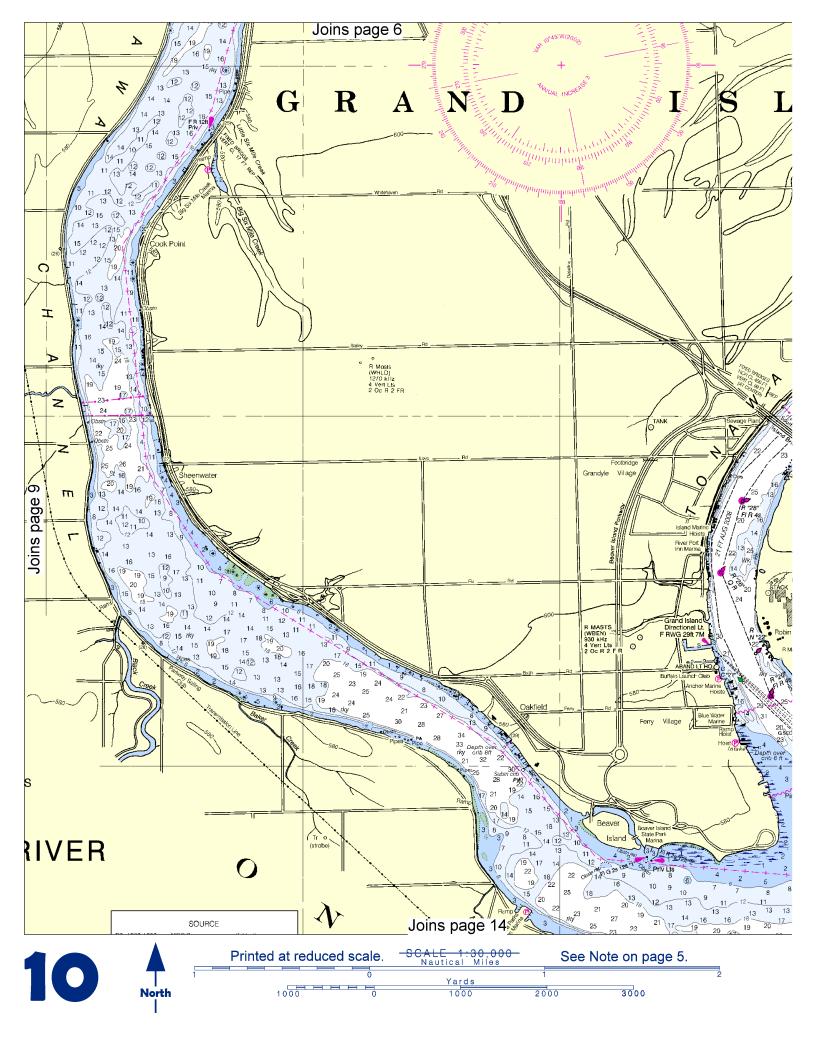
This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010, NGA Weekly Notice to Mariners: 0910 2/27/2010, Canadian Coast Guard Notice to Mariners: 0110 1/29/2010.

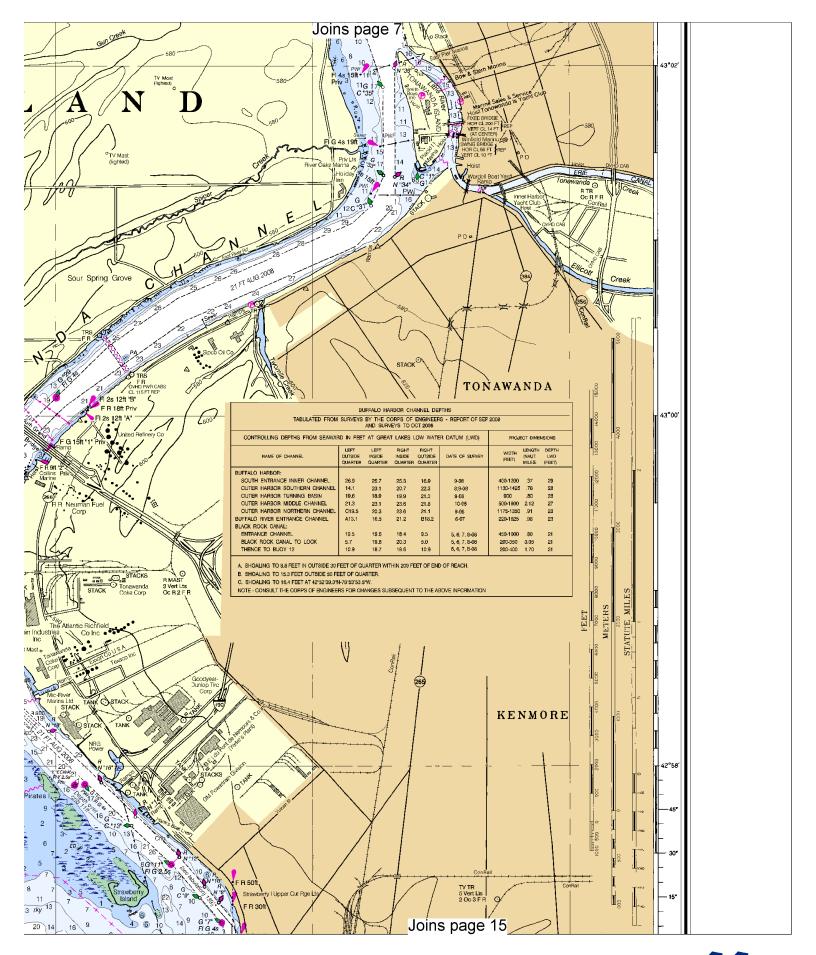


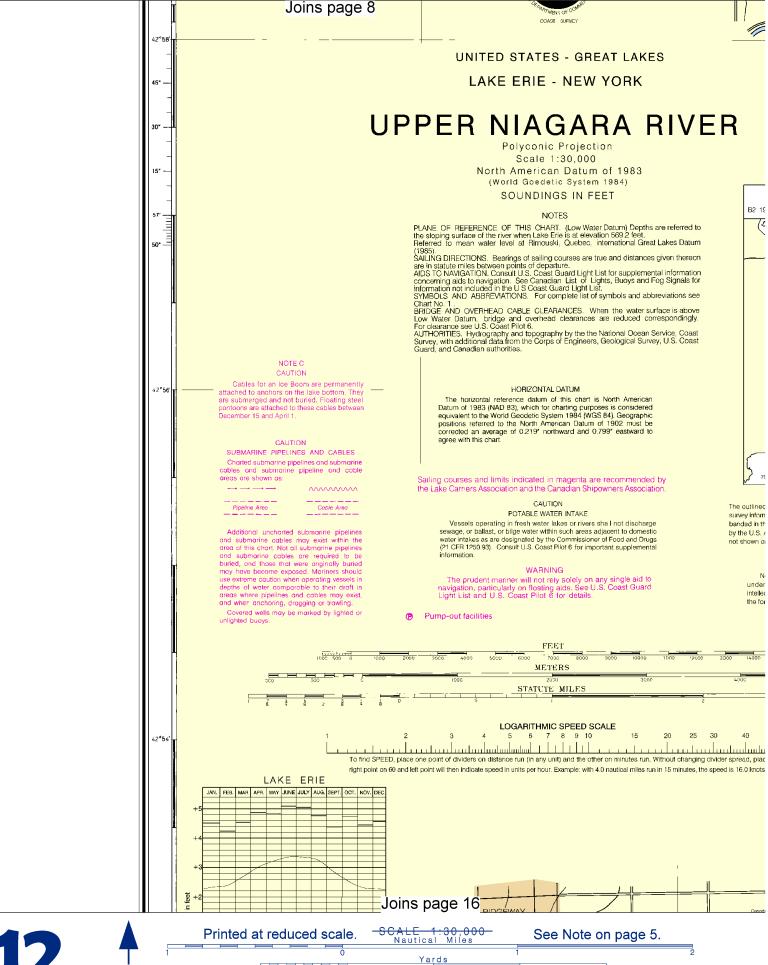












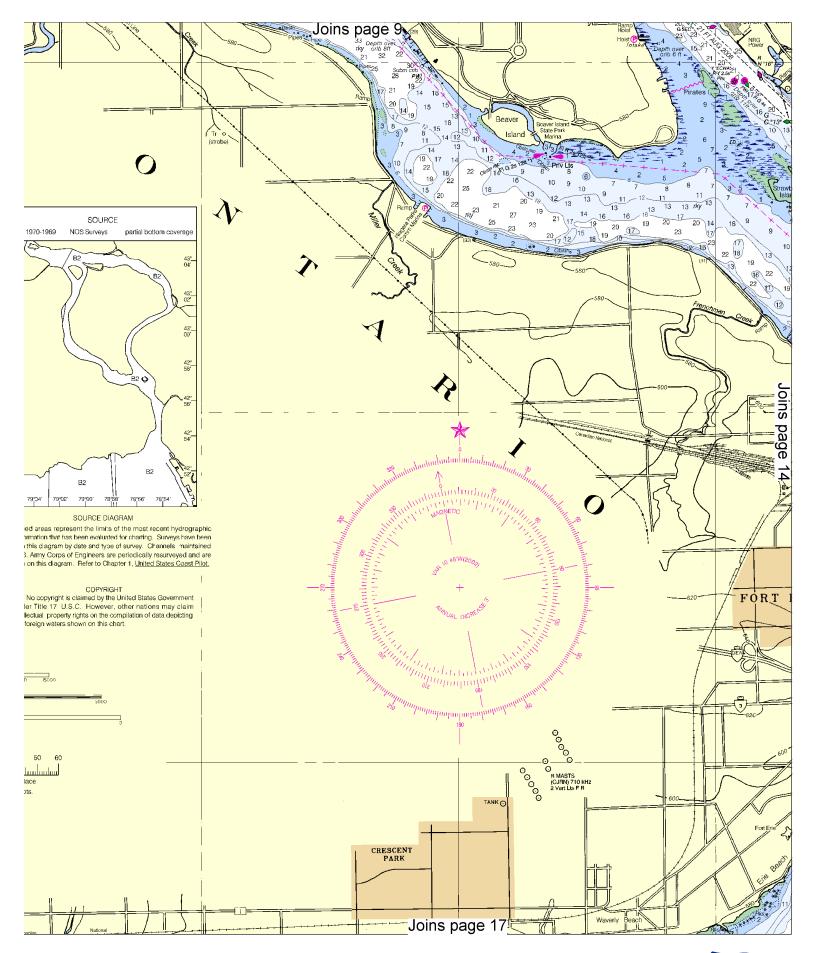
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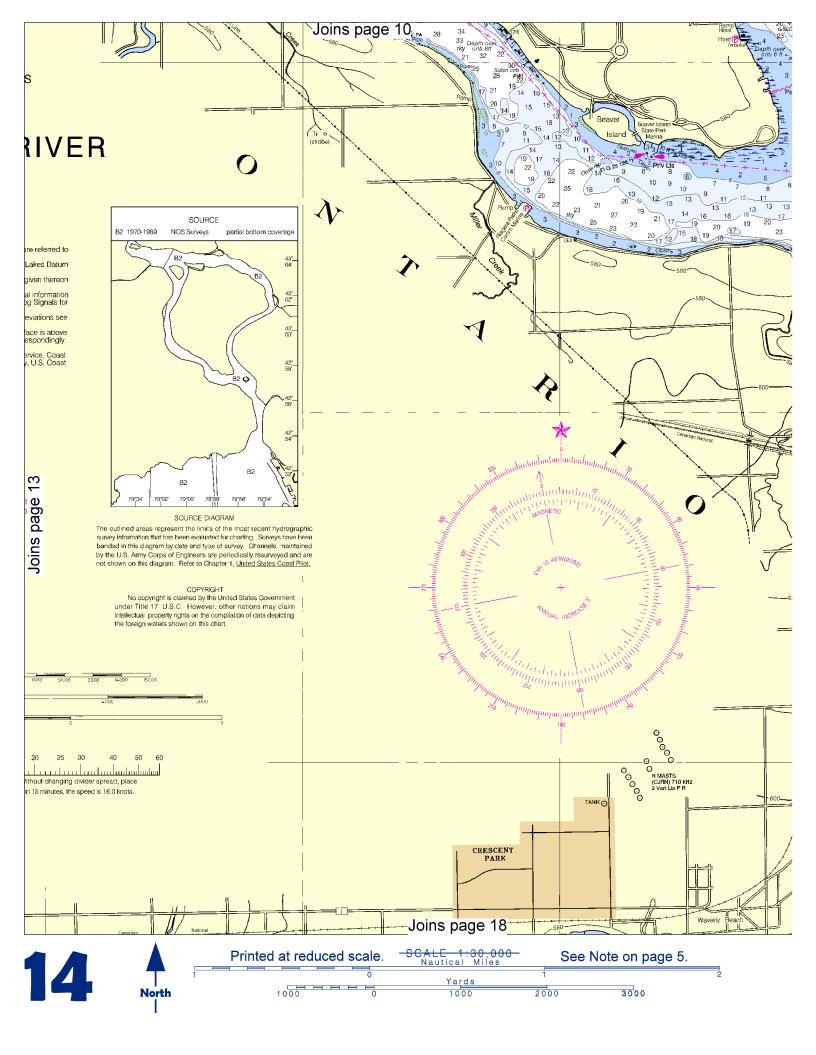
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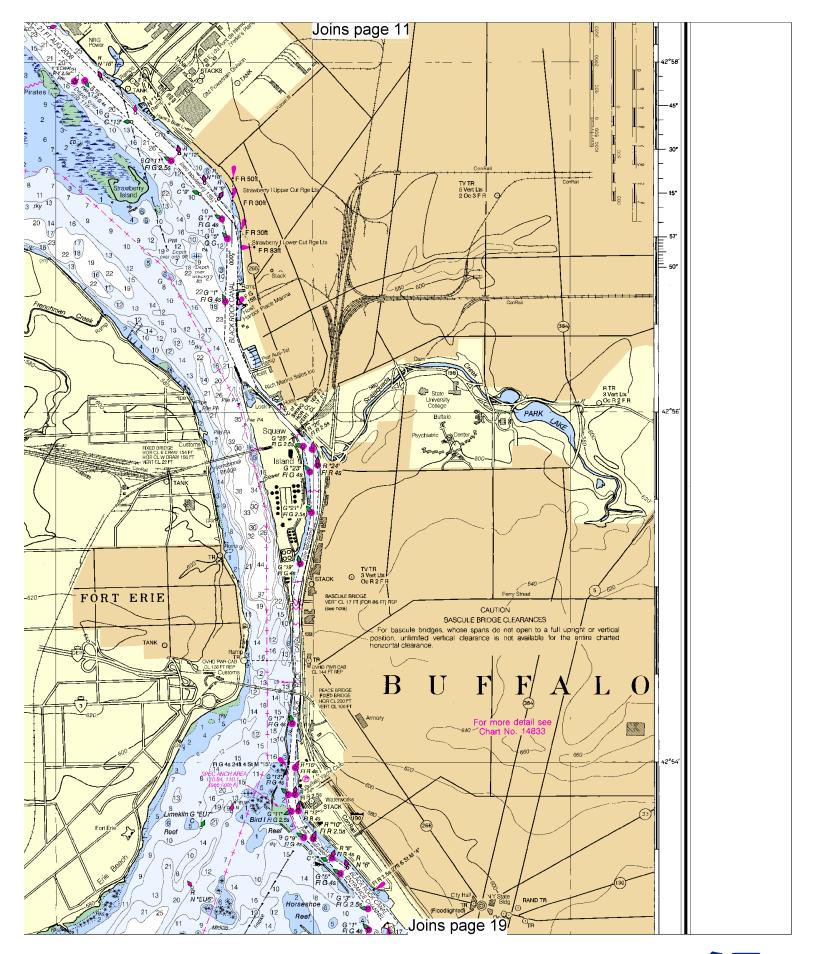
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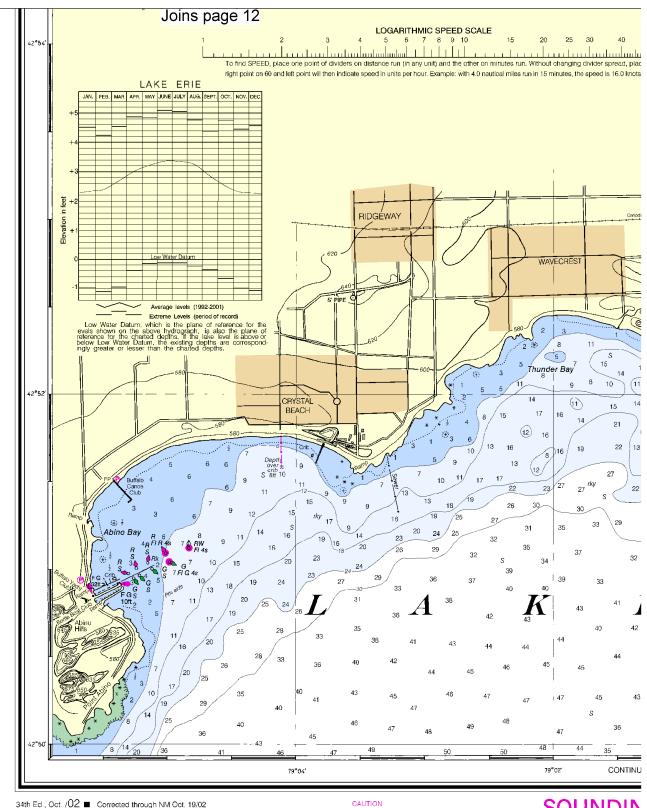
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North









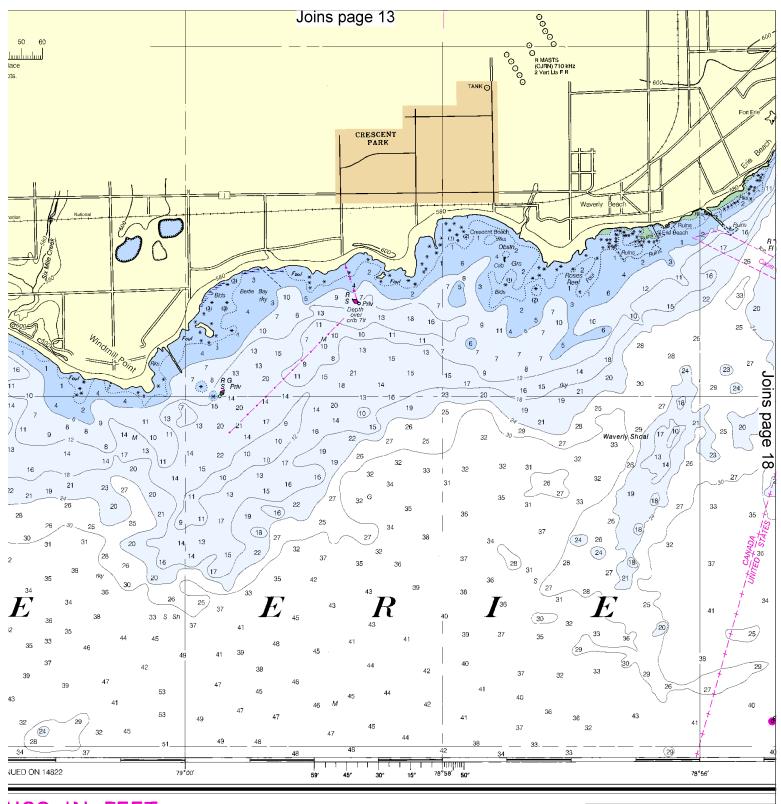
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This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

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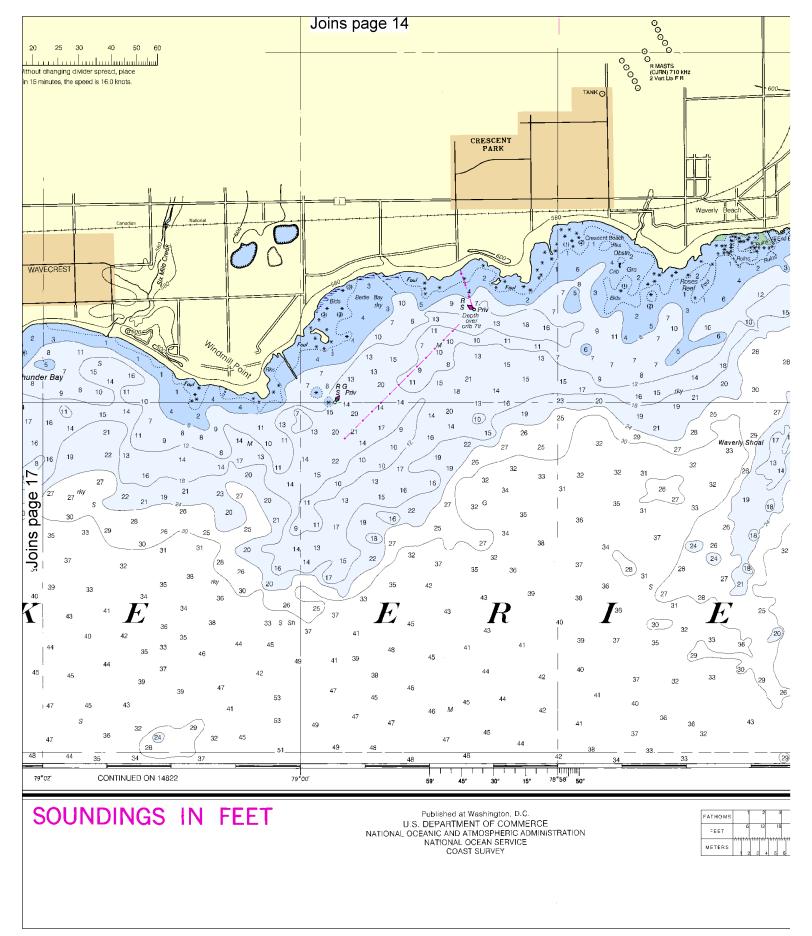




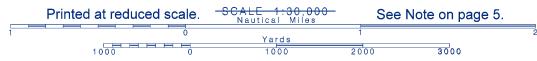
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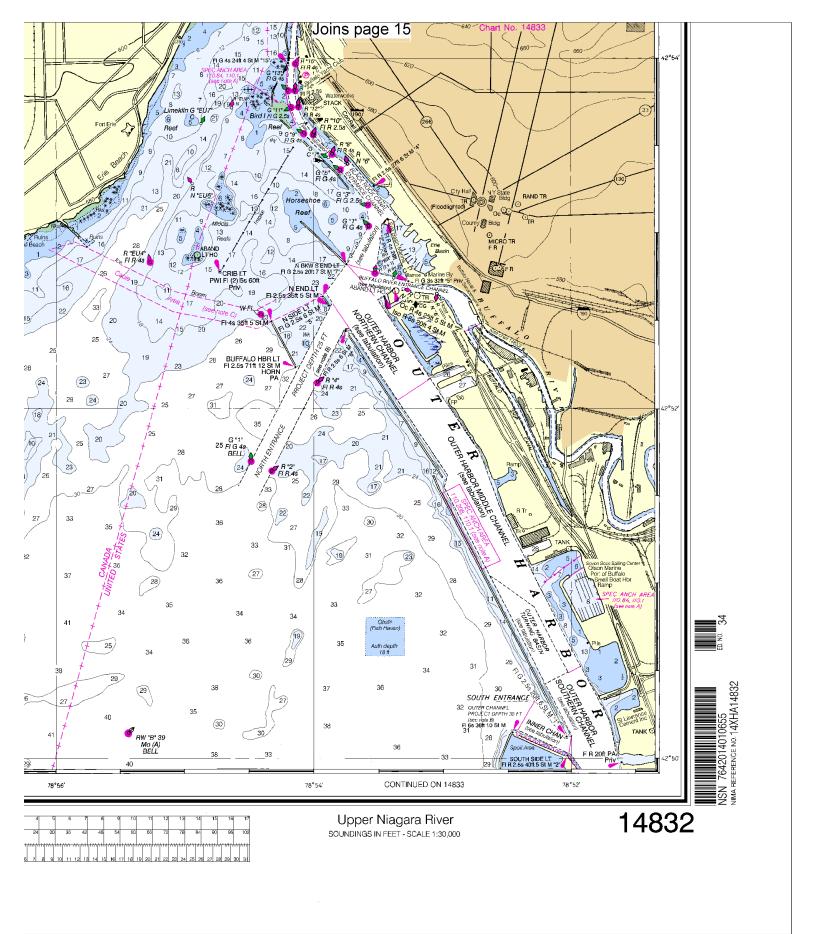
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY

FATHOMS	1	2	3	4	5	6	7	8	9	
FEET	6	12	18	24	30	36	42	48	54	
METERS	1 :	2 3	4 5	6 7	8 9	10 11 1:	2 13	14 18	16 1	7 16









# **EMERGENCY INFORMATION**

#### VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

## Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

#### **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

#### HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

**Coast Guard Search & Rescue (RCC)** – 216-902-6117

Coast Guard Search & Rescue (Buffalo) – 716-843-9527

**Canadian Coast Guard (RCC Trenton)** – 1-800-267-7270 or 613-965-3870

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

<u>Getting and Giving Help</u> – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



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Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at <a href="https://www.oceanGrafix.com">www.oceanGrafix.com</a>.

## Official Electronic Navigational Charts (NOAA ENCs®) –

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

## Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="